

We Claim:

1. An extract product from the root of *Polygonum multiflorum* Thunb.,
which is prepared from a process comprising the steps of:
 - (a) subjecting a suitable amount of a starting root material of
5 *Polygonum multiflorum* Thunb. to a freezing treatment for a period
of time;
 - (b) subjecting a frozen product obtained in step (a) to an extraction
treatment with methanol;
 - (c) subjecting a resultant product from step (b) to a separating
10 treatment to obtain a methanol solution free of extracted root
debris of the starting root material of *Polygonum multiflorum*
Thunb.; and
 - (d) removing methanol from the methanol solution obtained in step (c)
to obtain a methanol-extracted product.
- 15 2. An extract product from the root of *Polygonum multiflorum* Thunb.
according to Claim 1, wherein the product has a reverse-phase HPLC
elution profile as shown in Figure 1.
3. An extract product from the root of *Polygonum multiflorum* Thunb.
according to Claim 1, wherein in step (a) of the process, the starting
20 root material of *Polygonum multiflorum* Thunb. to be used therein is a
processed form of *Polygonum multiflorum* Thunb. root.
4. A pharmaceutical composition comprising an extract product from the
root of *Polygonum multiflorum* Thunb. as defined in Claim 1.
5. A pharmaceutical composition for promoting the proliferation of cells
25 selected from the group consisting of hepatocytes, bone marrow stem
cells, bone marrow stromal cells, bone marrow osteoprogenitor cells,
bone marrow hematopoietic progenitor cells, bone marrow

hematogenic cells, leukocytes and erythrocytes, comprising a therapeutically effective amount of an extract product from the root of *Polygonum multiflorum Thunb.* as defined in Claim 1.

6. A pharmaceutical composition for treating a subject afflicted with a
5 liver disease selected from liver dysfunction, liver fibrosis and liver cirrhosis, comprising a therapeutically effective amount of an extract product from the root of *Polygonum multiflorum Thunb.* as defined in Claim 1.
7. A pharmaceutical composition for treating a subject in need of
10 proliferation of cells selected from the group consisting of hepatocytes, bone marrow stem cells, bone marrow stromal cells, bone marrow osteoprogenitor cells, osteoblasts, bone marrow hematopoietic progenitor cells, bone marrow hematogenic cells, leukocytes and erythrocytes, comprising a therapeutically effective amount of an
15 extract product from the root of *Polygonum multiflorum Thunb.* as defined in Claim 1.
8. A pharmaceutical composition for treating a disorder or disease associated with the deficiency of bone marrow stem cells, comprising a therapeutically effective amount of an extract product from the root
20 of *Polygonum multiflorum Thunb.* as defined in Claim 1.
9. The pharmaceutical composition of claim 8, wherein the disorder or disease is selected from the group consisting of aging, osteoporosis, cancer, anemia and leukopenia.
10. A pharmaceutical composition for treating a subject in need of
25 restoration of bone marrow cells, comprising a therapeutically effective amount of an extract product from the root of *Polygonum multiflorum Thunb.* as defined in Claim 1.

11. The pharmaceutical composition of claim 10, wherein the subject is one selected from a hemodialysis patient, a patient receiving bone marrow transplantation therapy, and a cancer patient receiving irradiation therapy or chemotherapy or both.
- 5 12. A process for preparing an extract product from the root of *Polygonum multiflorum Thunb.* comprising the steps of:
 - (a) subjecting a suitable amount of a starting root material of *Polygonum multiflorum Thunb.* to a freezing treatment for a period of time;
 - 10 (b) subjecting a frozen product obtained in step (a) to an extraction treatment with methanol;
 - (c) subjecting a resultant product from step (b) to a separating treatment to obtain a methanol solution free of extracted root debris of the starting root material of *Polygonum multiflorum*
15 *Thunb.*; and
 - (d) removing methanol from the methanol solution obtained in step (c) to obtain a methanol-extracted product.
13. The process of Claim 12, wherein the starting root material of *Polygonum multiflorum Thunb.* used in step (a) is a processed form of
20 *Polygonum multiflorum Thunb.* root.
14. The process of Claim 12, wherein the freezing treatment of step (a) is conducted at a temperature ranging from -20°C to -70°C.
15. The process of Claim 13, wherein the freezing treatment of step (a) is conducted at a temperature of -70°C.
- 25 16. The process of Claim 12, wherein in step (b), the frozen product obtained in step (a) is crashed and immersed in methanol to allow extraction.

17. The process of Claim 12, wherein in step (c), the separating treatment is conducted by suction filtration.
18. The process of Claim 12, wherein in step (d), methanol is removed by evaporation *in vacuo*.
- 5 19. The process of Claim 12, wherein the methanol-extracted product obtained from step (d) is further lyophilized.
20. The process of Claim 12, wherein the methanol-extracted product obtained from step (d) is further subjected to a n-hexane extraction treatment comprising the steps of:
 - 10 (i) admixing the methanol-extracted product obtained from step (d) with a suitable amount water;
 - (ii) partitioning a resultant mixture from step (i) with n-hexane to form a n-hexane layer and a water layer;
 - (iii) collecting the n-hexane layer formed in step (ii), and
 - 15 (iv) removing n-hexane from the n-hexane layer collected in step (iii) to obtain a n-hexane -extracted product.
21. The process of Claim 20, wherein the water layer formed in step (ii) of the n-hexane extraction treatment is further subjected to an ethyl acetate extraction treatment comprising the steps of:
 - 20 (i') partitioning the water layer formed in step (ii) of the n-hexane extraction treatment with ethyl acetate to form an ethyl acetate layer and a water layer;
 - (ii') collecting the ethyl acetate layer formed in step (i'); and
 - (iii') removing ethyl acetate from the ethyl acetate layer collected in
 - 25 step (ii') to obtain an ethyl acetate-extracted product.
22. The process of Claim 21, wherein the water layer formed in step (i') of the ethyl acetate extraction treatment is further subjected to a

n-butanol extraction treatment comprising the steps of:

(i'') partitioning the water layer formed in step (i') of the ethyl acetate extraction treatment with n-butanol to form a n-butanol layer and a water layer;

5 (ii'') collecting the n-butanol layer formed in step (i''); and

(iii'') removing n-butanol from the n-butanol layer collected in step (ii'') to obtain a n-butanol-extracted product.

23. A pharmaceutical composition, comprising an extract product from the root of *Polygonum multiflorum* Thunb. prepared by a process
10 according to any one of Claims 12-22.